This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

1. (Previously presented) A multireactive polymerizable mesogenic compound of formula I

$$R^1$$
-MG- $R^2$ 

I

wherein

 $R^1$  is halogen, CN, OCN, NCS, NO<sub>2</sub> or an alkyl radical with 1 to 30 C atoms which may be unsubstituted, mono- or polysubstituted by halogen or CN, optionally one or more non-adjacent CH<sub>2</sub> groups being replaced, in each case independently from one another, by -O-, -S-, -NH-, -N(CH<sub>3</sub>)-, -CO-, -COO-, -OCO-, -S-CO-, -CO-S-, -CH=CH- or -C=C- in such a manner that oxygen atoms are not linked directly to one another, or alternatively has one of the meanings of  $R^2$  or is P-(Sp-X)<sub>n</sub>-,

P is a polymerizable group,

Sp is a spacer group with 1 to 25 C atoms,

X is -O-, -S-, -CO-, -COO-, -OCO-, -OCO-O-, -CO-NH-,
-NH-CO-, -OCH<sub>2</sub>-, -CH<sub>2</sub>O-, -SCH<sub>2</sub>-, -CH<sub>2</sub>S-, -CH=CH-COO-, -OOC-CH=CHor a single bond,

n is 0 or 1,

MG is a mesogenic group, and

R<sup>2</sup> is straight-chain or branched alkyl with 1 to 25 C atoms which may be unsubstituted, mono- or polysubstituted by halogen or CN, optionally one or more non-adjacent CH<sub>2</sub> groups being replaced, in each case independently from one another, by -O-,

-S-, -NH-, -N(CH<sub>3</sub>)-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CH=CH- or -C≡C- in such a manner that oxygen atoms are not linked directly to one another, and which is substituted with at least two identical or different groups P.

- 2. (Previously presented) A multireactive polymerizable mesogenic compound according to claim 1, wherein  $R^1$  is not a polymerizable group.
- 3. (Original) A multireactive polymerizable mesogenic compound according to claim 1, wherein  $R^1$  has one of the meanings of  $R^2$ .
- 4. (Original) A multireactive polymerizable mesogenic compound according to claim 1, wherein MG is of formula II

$$-(A^1-Z)_m-A^2-$$
 II

wherein

A<sup>1</sup> and A<sup>2</sup> are each independently 1,4-phenylene in which, in addition, one or more CH groups are optionally replaced by N; 1,4-cyclohexylene in which, in addition, one or two non-adjacent CH<sub>2</sub> groups are optionally replaced by O and/or S; 1,4-cyclohexenylene; 1,4-bicyclo(2,2,2)octylene; piperidine-1,4-diyl; naphthalene-2,6-diyl; decahydronaphthalene-2,6-diyl; or 1,2,3,4-tetrahydro-naphthalene-2,6-diyl; all these groups optionally being

unsubstituted, mono- or polysubstituted with F,Cl, OH, CN, NO<sub>2</sub> or alkyl, alkoxy, alkylcarbonyl or alkoxycarbonyl groups having 1 to 7 C atoms wherein one or more H atoms may be substituted by F or Cl, and

5. (Original) A multireactive polymerizable mesogenic compound according to claim 1, wherein P is selected from CH<sub>2</sub>=CW-COO-, WCH=CH-O-, CH<sub>2</sub>=CH-Phenyl-(O)<sub>k</sub>-

- 6. (Original) A multireactive polymerizable mesogenic compound according to claim 1, wherein R<sup>2</sup> is substituted with 2, 3, 4 or 5 identical or different polymerizable groups P.
- 7. (Previously presented) A multireactive polymerizable mesogenic compound according to claim 1, wherein  $R^2$  is a group of one of the following formulae

$$-X$$
-alkyl-CHP $^1$ -CH $_2$ -CH $_2$ P $^2$  Ia

$$-X$$
-alkyl-C(CH<sub>2</sub>P<sup>1</sup>)(CH<sub>2</sub>P<sup>2</sup>)-CH<sub>2</sub>P<sup>3</sup> Ib

$$-X$$
-alkyl-CHP $^{1}$ CHP $^{2}$ -CH $_{2}$ P $^{3}$  Ic

$$-X-alkyl-C(CH_2P^1)(CH_2P^2)-C_aH_{2a+1}$$
 Id

$$-X$$
-alkyl-CHP $^1$ -CH $_2$ P $^2$  Ie

$$-X$$
-alkyl- $CP^1P^2$ - $C_aH_{2a+1}$  Ig

$$-X-alkyl-C(CH_2P^1)(CH_2P^2)-CH_2OCH_2-C(CH_2P^3)(CH_2P^4)CH_2P^5$$
 Ih

-X-alkyl-CHP<sup>1</sup>CHP<sup>2</sup>-C<sub>a</sub>H<sub>2a+1</sub>

Ik

wherein

alkyl

is straight-chain or branched alkylene with 1 to 12 C atoms which may be unsubstituted, mono- or polysubstituted by halogen or CN, one or more non-adjacent CH<sub>2</sub> groups optionally being replaced, in each case independently from one another, by -O-, -S-, -NH-, -N(CH<sub>3</sub>)-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CH=CH- or -C≡C- in such a manner that oxygen atoms are not linked directly to one

another,

a and b

are identical or different integers from 0 to 6,

X

has one of the meanings given in formula I, and

 $P^1$  to  $P^5$ 

independently have one of the meanings of P given in formula I.

A multireactive polymerizable mesogenic compound 8. (Previously presented) according to claim 5, wherein R<sup>2</sup> is a group of one of the following formulae

-X-alkyl-CHP<sup>1</sup>-CH<sub>2</sub>-CH<sub>2</sub>P<sup>2</sup>

Ιa

-X-alkyl-C(CH<sub>2</sub>P<sup>1</sup>)(CH<sub>2</sub>P<sup>2</sup>)-CH<sub>2</sub>P<sup>3</sup>

Ib

-X-alkyl-CHP1CHP2-CH2P3

Ic

 $-X-alkyl-C(CH_2P^1)(CH_2P^2)-C_aH_{2a+1}$ 

Id

-X-alkyl-CHP<sup>1</sup>-CH<sub>2</sub>P<sup>2</sup>

Ie

-X-alkyl-CHP<sup>1</sup>P<sup>2</sup>

Ιf

-X-alkyl-CP<sup>1</sup>P<sup>2</sup>-C<sub>a</sub>H<sub>2a+1</sub>

Ig

 $-X-alkyl-C(CH_2P^1)(CH_2P^2)-CH_2OCH_2-C(CH_2P^3)(CH_2P^4)CH_2P^5$ 

Ih

-X-alkyl-CH((CH<sub>2</sub>)<sub>a</sub>P<sup>1</sup>)((CH<sub>2</sub>)<sub>b</sub>P<sup>2</sup>)

Ιi

-X-alkyl-CHP $^{1}$ CHP $^{2}$ -C $_{a}$ H $_{2a+1}$ 

Ik

wherein

alkyl

is straight-chain or branched alkylene with 1 to 12 C atoms which may be unsubstituted, mono- or polysubstituted by halogen or CN, one or more non-adjacent CH<sub>2</sub> groups optionally being replaced, in each case independently from one another, by -O-, -S-, -NH-, -N(CH<sub>3</sub>)-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CH=CH- or -C≡C- in such a manner that oxygen atoms are not linked directly to one

another,

a and bare

identical or different integers from 0 to 6,

X

has one of the meanings given in formula I, and

 $P^1$  to  $P^5$ 

independently have one of the meanings of P given in formula I.

- 9. (Previously presented) A multireactive polymerizable mesogenic compound according to claim 7, wherein alkyl is -(CH<sub>2</sub>)<sub>c</sub>-, with c being an integer from 1 to 12.
- 10. (Original) A multireactive polymerizable mesogenic compound according to claim 1, wherein each P is independently of each other acrylate, methacrylate, vinyl, vinyloxy, epoxy or p-vinylphenyloxy.

## 11. - 16. (CANCELED)

17. (Previously presented) A multireactive polymerizable mesogenic compound according to claim 8, wherein alkyl is -(CH<sub>2</sub>)<sub>c</sub>-, with c being an integer from 1 to 12.

18. (Previously presented) A multireactive polymerizable mesogenic compound according to claim 1, wherein MG is a group of one of the following formulae II-1 to II-25 or a mirror image thereof:

-Phe-Z-Phe-	II-1
-Phe-Z-Cyc-	II-2
-Cyc-Z-Cyc-	II-3
-PheL-Z-Phe-	II-4
-PheL-Z-Cyc-	II-5
-PheL-Z-PheL-	II-6
-Phe-Z-Phe-Z-Phe-	II-7
-Phe-Z-Phe-Z-Cyc-	· · · · · · · · · · · · · · · · ·
-Phe-Z-Cyc-Z-Phe-	II-9
-Cyc-Z-Phe-Z-Cyc-	II-10
-Phe-Z-Cyc-Z-Cyc-	II-11
-Cyc-Z-Cyc-Z-Cyc-	II-12
-Phe-Z-Phe-Z-PheL-	II-13
-Phe-Z-PheL-Z-Phe-	II-14
-PheL-Z-Phe-Z-Phe-	II-15
-PheL-Z-Phe-Z-PheL-	II-16
-PheL-Z-PheL-Z-Phe-	II-17
-PheL-Z-PheL-	II-18
-Phe-Z-PheL-Z-Cyc-	II-19
-Phe-Z-Cyc-Z-PheL-	II-20
-Cyc-Z-Phe-Z-PheL-	II-21
-PheL-Z-Cyc-Z-PheL-	II-22
-PheL-Z-PheL-Z-Cyc-	II-23
-PheL-Z-Cyc-Z-Cyc-	II-24
-Cyc-Z-PheL-Z-Cyc-	II-25

wherein Phe is 1,4-phenylene, PheL is a 1,4-phenylene group which is substituted by 1 to 4 groups L, with L being F, Cl, CN, OH, NO<sub>2</sub> or an optionally fluorinated alkyl, alkoxy or alkanoyl group with 1 to 7 C atoms, Cyc is 1,4-cyclohexylene and Z are independently -O-,

-S-, -CO-, -COO-, -OCO-, -CO-NH-, -NH-CO-, -CH<sub>2</sub>CH<sub>2</sub>-, -OCH<sub>2</sub>-, -CH<sub>2</sub>O-, -SCH<sub>2</sub>-, -CH<sub>2</sub>S-, -CH=CH-, -CH=CH-COO-, -OCO-CH=CH-, -C≡C- or a single bond.

- 19. (Previously presented) A multireactive polymerizable mesogenic compound according to claim 1, wherein Sp is a linear or branched alkylene group having 1 to 20 C atoms, in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced by -O-, -S-, -NH-, -N(CH<sub>3</sub>)-, -CO-, -O-CO-, -S-CO-, -O-COO-, -CO-S-, -CO-O-, -CH(halogen)-, -CH(CN)-, -CH=CH- or -C≡C-.
- 20. (Previously presented) A multireactive polymerizable mesogenic compound according to claim 1, wherein R<sup>1</sup> is a chiral alkyl radical with 1 to 30 C atoms which may be unsubstituted, mono- or polysubstituted by halogen or CN, optionally one or more non-adjacent CH<sub>2</sub> groups being replaced, in each case independently from one another, by -O-, -S-, -NH-, -N(CH<sub>3</sub>)-, -CO-, -COO-, -OCO-O-, -S-CO-, -CO-S-, -CH=CH- or -C≡C- in such a manner that oxygen atoms are not linked directly to one another.